

W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 57750

April 14, 2010 11:37:30 AM



Page 2

Item ID: D2365

Accept



Setup Start



Revision ID:

Item Name: Wearplate

Stop



Start Date: 4/14/10 Start Qty: 6.00



Cust Item ID:

Required Date: 4/16/10 Req'd Qty: 6.00



Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130



HandFinish

Memo

0.00

0.00

Hand Finishing

20 BR 10-5-11

140



QC

QC3- Inspect Part Finish

Memo

0.00

0.00

Quality Control

JL 10/05/11

30
20 9

150



Small Fab

Small Fab

Memo

0.00

0.00

Small Fab

Install Insert as per Dwg D2365

9/5/10/05/13 (306)

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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:			WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
				Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 57750

April 14, 2010 11:37:31 AM



Page 3

Item ID: D2365

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearplate

Start Date: 4/14/10

Start Qty: 6.00



Cust Item ID:

Required Date: 4/16/10

Req'd Qty: 6.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Sides 1/3

counted

(x30)

Memo

0.00

170



Packaging

Packaging

Identify as per dwg & Stock Location: 12

0.00

Memo

0.00

10-5-24

(300) SP

180



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/05/17 AJ

p/10-5-17
(30)

W/O:			WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:			WORK ORDER NON-CONFORMANCE (NCR)						
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				Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

April 14, 2010 11:37:18 AM

Page 1

Work Order ID: 57750

Parent Item: D2365

Parent Item Name: Wearplate

Comments: IPP Rev A Removed from 9 Digit 05-12-05 JLM
(IPP Rev:B Now On Waterjet 08-04-04 JLM Verified By:EC

Start Date: 4/14/10

Required Date: 4/16/10

Start Qty: 6.00

Required Qty: 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
FE 832-EP D3996-Fe-832-EP		Purchased	No			100	Each	0.0000	12.0000			
PEM Insert												
M6061T6S.063		Purchased	No			150	sf	175.0000	0.0297			
6061-T6 .063 Sheet												

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT21

113608

175

175

113608

30

10-5-6

ES 10/05/13

60X

B54162

W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

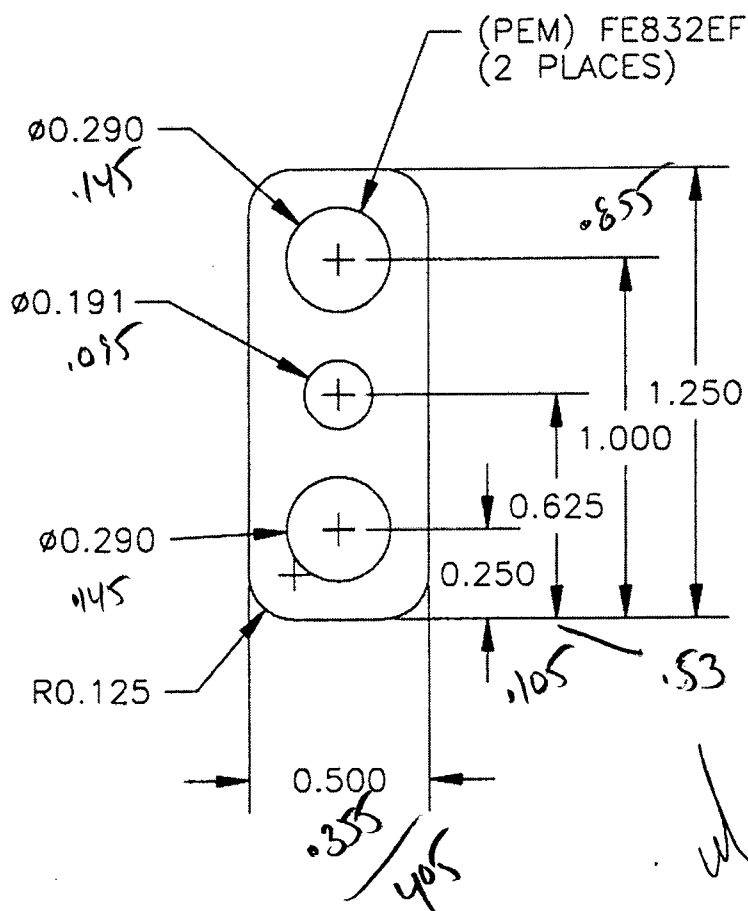
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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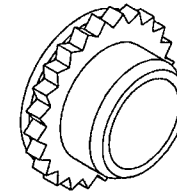
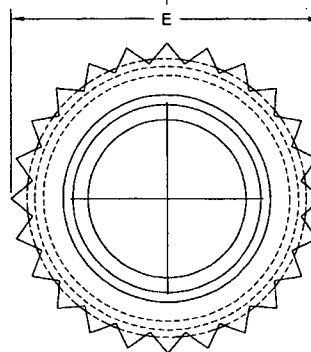
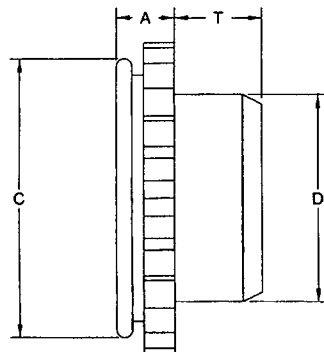
DESIGN		DRAWN BY		DART AEROSPACE LTD	
B WILLIAMS		B WILLIAMS		VICTORIA INTERNATIONAL AIRPORT, CANADA	
CHECKED		APPROVED		DRAWING NO. REV.: C	
B.W.		[Signature]		D2365 SHEET 1 OF 1	
DATE		TITLE		SCALE	
95:01:20		WEAR PLATE		2:1	
C	95:03:06	0.191 WAS 0.197			

RELEASED
97/04/22 OS



6061-T6 (00-A-ZSD/11) 0.063 THICK } # 00.09.26
ACID ETCH + ALUMINE PER QSE D05 4-1-1 }
~~ALSI 304/316 SS~~ INSTALL FE832EF (2 PLS) AFTER ALUMINE }
MATERIAL: 6061-T6 ALUMINUM 0.063 THICK, ANODIZE BLACK. } # 00.09.27
AFTER ANODIZING INSTALL (PEM FE832EF) 2 PLACES }
00.09.27

SPECIFICATION CONTROL DRAWING



D3996-XXX-YYY-ZZZ SELF-CLINCHING FASTENER

THREAD SIZE	THREAD CODE ("YYY")	TYPE ("XXX")	A MAX (SHANK)	SHEET THICKNESS	C +0.000 -0.005	D MAX	E ±0.005	T +0.015 -0.000	HOLE SIZE IN SHEET +0.003/-0.000	MIN DIST: HOLE CL TO EDGE	WEIGHT lb
#4-40 (0.112)	440	FEO	0.040	0.039-0.045	0.171	0.145	0.192	0.065	0.172	0.14	0.00031
		FE	0.060	0.059-0.070							0.00037
#6-32 (0.138)	632	FEO	0.040	0.039-0.045	0.212	0.180	0.244	0.075	0.213	0.17	0.00047
		FE	0.060	0.059-0.070							0.00068
#8-32 (0.164)	832	FEO	0.040	0.039-0.045	0.289	0.215	0.322	0.090	0.290	0.20	0.00098
		FE	0.060	0.059-0.070							0.00124
#10-32 (0.190)	032	FEO	0.040	0.039-0.045	0.289	0.245	0.322	0.110	0.290	0.20	0.00104
		FE	0.060	0.059-0.070							0.00120
1/4-28	0428	FE	0.060	0.059-0.070	0.343	0.318	0.384	0.120	0.344	0.28	0.00158

NOTES

1) SPECIFICATION: PENNINGENGINEERING (PEM) MINIATURE SELF-CLINCHING FASTENER, SELF-LOCKING
PEM P/N XXX-YYY-ZZZ

WHERE "XXX" = TYPE "FEO" (SHORT SHANK) OR "FE" (LONG SHANK) PER TABLE
"YYY" = THREAD CODE PER TABLE
"ZZZ" = FINISH CODE PER NOTE 2 BELOW

FOR EXAMPLE, #8-32 THREAD, LONG SHANK, ELECTRO-FILM FINISH:
DART P/N = D3996-FE-832-EF
PEM P/N = FE-832-EF

2) FINISH: FINISH CODE ("ZZZ") PER THE FOLLOWING:

"C" = CADMIUM YELLOW CHROMATE PER ASTM B766 CLASS 5 TYPE II
"CI" = CADMIUM CLEAR CHROMATE PER ASTM B766 CLASS 5, TYPE III
"EF" = ELECTRO-FILM PER MIL-PRF-46010
"MD" = MOLYBDENUM DISULFIDE DRY FILM (STD PEM FINISH)

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: N/A

6) IDENTIFICATION: N/A

7) WEIGHT: N/A

REFERENCE ONLY

RELEASED
2009-11-08

A	NEW ISSUE	CP	09.10.01
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.10.01		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D3996	REV. A
TITLE SELF-CLINCHING FASTENER	SCALE NTS
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